

APPENDIX B

PARTIES FILING COMMENTS IN RESPONSE TO NOTICE OF PROPOSED RULE MAKING IN DOCKET NO. 20520

(No reply comments were filed.)

Aetna Life & Casualty Company  
American Bankers Association  
American Broadcasting Companies, Inc.  
American Life Insurance Association  
Association of Closed End Investment Company  
Belo Broadcasting Corporation  
Boston Broadcasters, Inc.  
CBS, Inc.  
Doubleday Broadcasting Company, Inc., and Doubleday & Co., Inc.  
General Electric Broadcasting Company, Inc.  
Investment Company Institute  
Investors Diversified Services, Inc.  
Massachusetts Financial Services, Inc.  
Metromedia, Inc.  
National Cable Television Association  
National Citizens Committee for Broadcasting  
Poole Broadcasting Company  
Prudential Insurance Company of America  
RKO General, Inc.  
Scripps-Howard Broadcasting Company  
Security Pacific National Bank  
Senator Lee Metcalf (D-Mont.)  
Teachers Insurance and Annuity Association of America and College Retirement Equities Fund

PARTIES FILING INFORMAL COMMENTS TO NOTICE OF PROPOSED RULE MAKING IN DOCKET NO. 20520

Allstate Insurance Company  
Association of Registered Bank Holding Companies  
Lois Brown, Chairperson, Legislative Committee, Philadelphia Community Cable Coalition; Member, Steering Committee, Citizens for Cable Awareness in Pennsylvania  
National Association of Independent Insurers  
Scudder, Stevens & Clark  
T. Rowe Price Associates, Inc.

[FR Doc. 76-18045 Filed 6-21-76; 8:45 am]

[Docket No. 20603; FCC 76-530]

PART 83—STATIONS ON SHIPBOARD IN THE MARITIME SERVICES

International Radio Regulations Pertaining to the Maritime Mobile-Satellite Service, Geneva, 1971 and the Maritime WARC, Geneva, 1974

By the Commission:

1. The Commission has under consideration its Notice of Proposed Rule Making adopted September 24, 1975, in the above entitled matter to provide for the licensing of ship earth stations in the maritime mobile-satellite service which was published in the Federal Register on October 3, 1975 (40 FR 45850). The dates for filing comments and reply comments thereto have passed.

2. All comments and reply comments have been fully considered and the major points raised will be discussed herein. Comments were submitted by the following parties: AII Systems; American Institute of Merchant Shipping, (AIMS); American Radio Association, AFL-CIO; and the Radio Officers Union, AFL-CIO; Atlantic Richfield Company (ARCO); Central Committee on Telecommunications of the American Petroleum Institute

(API); Gulf Radiotelephone and Electronics; GTE Service Corporation; (GTESC); Magnavox; and MARISAT participants—COMSAT General Corporation (COMSAT General, RCA Global Communications, Inc. (RCA), Western Union International, Inc. (WUI), and ITT World Communications, Inc. (ITT). Reply comments were submitted by the American Radio Officers Union, AFL-CIO and COMSAT General. The Office of Telecommunications Policy of the Executive Office of the President has also commented in this proceeding.

3. Only issues pertaining to certain technical requirements, eligibility, station licensing and operator licensing are addressed in this order. A second report and order will be released at a later date which will consider the remaining issues. Responses to our notice indicate that retention of flexibility to encourage the development of the maritime mobile-satellite service is a desirable objective of any rules which the Commission may adopt. Comments take issue with certain proposed technical requirements in our notice on the basis that these are unnecessarily strict and would tend to frustrate development and add unnecessarily to the cost of ship station equipment. In addition, API suggests that the Commission broaden its eligibility requirements to include licensing of communications subsidiaries and to provide for the operation of earth stations at temporary locations under a ship earth station license. Further, responses to our operator licensing proposal were divided sharply, with labor unions supporting the Commission's proposal and users and carriers opposing it as unduly restrictive on the basis that the operator of ship earth station equipment to be used in the system will not have access to controls which could effect station parameters such as transmitter frequency, power output or stability. Thus minimum P-2 licensing requirements ought not apply. Finally MARISAT participants have questioned the need for the priorities of communications proposed by the Commission.

TECHNICAL REQUIREMENTS

4. In its notice the Commission did not propose to impose type approval or type acceptance requirements<sup>1</sup> on equipment authorized to operate in the MARISAT system in the frequency bands

<sup>1</sup> In this connection, comments submitted by the MARISAT participants refer to a document entitled "Type Acceptance Procedures for MARISAT Mobile Terminals" dated October 29, 1975, which has been approved and issued by them. While the Commission does not object to participants establishing procedures to be followed in verifying that ship earth stations to be used with MARISAT meet technical requirements established by the Joint Venture, we request that the participants specifically avoid use of the terms "type acceptance" and "type approval" when referring to such procedures, and that any test procedures or other requirements are not to be construed as being mandatory or enforced by the Commission.

available under its proposed rules in order that full scope of development might be encouraged. The notice did, however, propose certain technical standards to minimize intersystem and intrasystem interference. Responses to our notice confirm the desirability of encouraging flexibility to promote development and we agree with this objective. Accordingly, pending further operational experience in maritime satellite systems and further rule making only technical requirements pertaining to frequency tolerance, classes of emission, authorized bandwidth, transmitter power, and emission limitations are being adopted. With respect to spurious emission limitations, the MARISAT participants opposed the Commission's proposal on the basis that such limitations are 3dB more stringent than those contained in its technical requirements document for MARISAT mobile terminals and that these requirements were developed through careful study of potential intersystem and intrasystem interference possibilities. The Commission based its proposed spurious emission limitations on a Department of Commerce's Office of Telecommunications technical specification<sup>2</sup> which sought among other things, to protect proposed collision avoidance systems (CAS) which may operate in the frequency band 1535-1660 MHz. The Office of Telecommunications Policy, on behalf of the Office of Telecommunications, has advised the Commission that the spurious emission suppression levels proposed by the MARISAT participants will afford sufficient protection. Accordingly, the Commission adopts the proposal noting that the MARISAT participants' filing replaces the band 1636.5 to 1644 MHz by 1634 MHz to 1647.5 MHz for the 60 dB attenuation value. MARISAT participants also objected to the Commission's limiting ship earth stations to F3, F9, P0 and P9 emissions. In the absence of any supporting reasons for its objection, the Commission believes that these designators will suffice for emissions contemplated in maritime satellite systems for the foreseeable future. Thus, we adopt these rules as proposed. Proposed technical requirements as to frequency tolerance, authorized bandwidth and transmitter power met with no objection and are adopted.

5. Although the Commission will not, at this time adopt ship earth station standards for antenna performance, antenna axial ratio or receiver noise temperatures, this does not mean that we will not be more specific in future rule making proceedings as experience is gained with an operating maritime satellite system. For example, the Commission encourages operation of ship earth station antennas at elevation angles below 10°, to determine what multipath interference may exist and what effect, if any,

<sup>2</sup> Office of Telecommunications technical memorandum 74-165-2 entitled "Spectrum Resource Assessment for the 1535-1660 MHz band", October 1974.



such interference may have on user service. Full information as to problems and results experienced in the operating system will be necessary to aid the Commission in its efforts, and extensive comments and reports from licensees in these respects will be most useful.

#### ELIGIBILITY REQUIREMENTS

6. Turning to the question of eligibility, API has requested that the Commission in addition to authorizing the owner or operator of a ship, permit "any qualified 'member' of a corporate 'family' to obtain a station authorization allowing it to provide the actual user entity with a non-profit radio communications service." Such provision would allow the communication subsidiary corporations utilized by many petroleum and gas companies that own or operate ships, to be the licensee. Since this is consistent with licensing arrangements in the maritime mobile service, the Commission agrees. API also suggests that the Commission consider including provision in the rules for operations for extended periods aboard petroleum and gas drilling vessels—some of which are self propelled and others which must be towed. Such offshore drilling programs may extend over a period of days, weeks or even months, and API states that the Commission's rules should make it clear that these types of temporary operations are eligible for participation in maritime satellite systems. The Commission believes that there is no need for special provisions since we presently license such operations in the maritime mobile service as ship stations, and ship stations which are eligible in the maritime mobile service will also be eligible in the maritime mobile-satellite service.

#### OPERATOR LICENSING

7. In proposing that operators of ship earth stations hold at least a second class radiotelephone license,<sup>2</sup> the Commission had considered the need for flexibility of operations, while at the same time we recognized that satellite communications to and from ships is an emerging service which will likely require special skills, particularly in the maintenance and repair of ship terminal equipment. Also, we considered that larger vessels will already have a first or second class operator aboard and these will likely be the kinds of vessels to be initially outfitted with satellite terminals. The American Radio Association, (ARA), AFL-CIO and the Radio Officer's Union, (ROU), AFL-CIO have supported the Commission's proposal, stating that the second class license is the minimum technical type license for which an ap-

plicant must possess, as qualifications, a knowledge of electricity and radio sufficient to operate, adjust, maintain and repair telecommunications equipment, and that maintenance needed to keep equipment in operational condition and restore it to operational condition if it malfunctions can only be performed by a person possessing qualifications of at least a P-2 type license. Most other parties contend that the operator of the station will only be able to perform limited functions, such as choosing the mode of operation, call priority and antenna re-orientation-functions which appropriately may be performed by unlicensed persons or, at most, by persons holding a third class radiotelephone operator's license;<sup>3</sup> that he cannot adjust the transmitter power, transmit frequency or emissions which are controlled, assigned or adjusted at the shore based earth station; that a requirement for first or second class operator license will likely eliminate the satellite option for many smaller vessels of less than 1600 gross tons, since such vessels have limited living quarters and could not economically justify a full time radio officer; and that only if satellite equipment becomes compulsory and replaces radiotelegraph equipment on ships to meet the Safety of Life at Sea requirements, should the Commission consider a second class radiotelephone license as a minimum to operate the station. All parties agree that functions such as satellite terminal installation, maintenance and repair must be performed by, or under the supervision of, the holder of at least a radiotelephone second-class operator permit.

8. Reply comments of ARA/ROU opposed the arguments of the other parties on the basis that such arguments blur or ignore the difference between use of the ship earth station equipment and the operation and supervision of its use. It is the view of ARA/ROU that use of the ship earth station is available to non-holders of P-2 licenses such as Deck Officers, passengers or others but that the operation and supervision of its use should be performed by the holders of P-2 licenses or higher. In the view of ARA/ROU, adjustment, troubleshooting, maintenance and repair of equipment as well as operation and supervision of its operation are properly functions to be performed by holders of at least P-2 permits. Moreover, ARA/ROU state that present practice aboard vessels of the U.S. merchant marine, which have high frequency single sideband radiotelephone transmitters, is that the equipment is located in the radio room and is operated under the supervision of the holder of a license which is P-2 or higher while such equipment is used remotely on the vessel's bridge by Deck Officers.

<sup>2</sup> A radiotelephone third-class operator permit may be awarded to an applicant who demonstrates an ability to transmit and receive spoken messages in English and passes a written examination comprising questions concerning elements of basic law and basic operating practices.

9. The issue before the Commission with respect to operator licensing is whether functions to be performed at the ship earth station may be separated, and if so, what class of license ought to be held by persons performing specific categories of functions. Most parties agree that the ability to perform functions such as composing messages, minor antenna adjustments and transmitting and receiving messages in the English language require one skill level while another skill level is clearly indicated in connection with performance of ship earth station installations, maintenance and repair. The Commission essentially agrees with this view. We believe that the availability of satellite terminal equipment aboard ship will greatly simplify performance of calling and receiving functions and reduce the amount of adjustment needed to be performed on below decks equipment. For example, transmitter power adjustment, frequency assignment and adjustments which have been performed by holders of P-2 licenses or higher in terrestrial shipboard communications systems will now be performed at the shore station. Further, provision exists in the shipboard terminal equipment for unattended routine operation for most of the time. These factors indicate that it is desirable to keep at a minimum any regulatory provisions for operator licensing in order that non-maintenance, non-repair functions such as sending and receiving messages at the operator's console or elsewhere may be performed by holders of non-technical operator permits.

10. Accordingly, the Commission is adopting as a minimum operator requirement a restricted radiotelephone operator permit (RP) which requires no oral or written examination. In lieu thereof, applicants are required to certify in writing to a declaration which states that the applicant has need for the requested permit; can receive and transmit spoken messages in English; can keep at least a rough written log in English or in some other language in general use that can be readily translated into English; is familiar with the provisions of treaties, laws, and rules and regulations governing the authority granted under the requested permit; and understands that it is his responsibility to keep currently familiar with all such provisions. In setting forth this standard the Commission imposes no minimum technical requirements on applicants since the holder of an RP will not be authorized to perform technical functions related to installation, maintenance troubleshooting and repair of ship earth station equipment. The Commission expects such functions to be performed by or under supervision of qualified maintenance personnel who hold radiotelephone second-class operator permits or higher.

#### TELECOMMUNICATIONS PRIORITY AND APPLICATIONS

11. MARISAT participants have also suggested that § 83.177 which provides for an extensive priority communications scheme is unnecessary for a maritime

<sup>2</sup> To be awarded a radiotelephone second-class operator license it is necessary that applicants be able to transmit and receive spoken messages in English and pass a written examination comprising questions concerning elements of basic law, basic operating practices and basic technical, legal and other matters particularly applicable to the operation of radiotelephone stations other than broadcast.



satellite system. It is argued that such a scheme was required as a result of congestion and delay in communications encountered in terrestrial services but, because of the communications capacity and reliability of the MARISAT system the probability of successfully transmitting a message is very high. Although the MARISAT system does provide for assigning four different priorities to allow priority assignment of channels to distress, urgency and safety messages, participants recommend that the Commission allow further time for study and development of appropriate priority requirements for communications in the maritime mobile-satellite service.

12. While the Commission essentially agrees that the extensive priority scheme applicable to terrestrial maritime services may not necessarily apply to a maritime satellite system for the reasons stated, we believe that because of the essential safety nature of maritime communication services, some provision in our rules for priority of telecommunications is required, even at this early stage of operation. As a result, we have included in our rules a provision which affords distress, urgency and safety messages priority over all others.

13. With respect to obtaining Commission licenses, applicants must file FCC Form 501 for authorization to use frequencies available under these rules.

14. In consideration of the foregoing, the Commission finds that amendment of its rules to permit the licensing and operation of ship earth stations in the maritime mobile-satellite service is in the public interest and should be approved. Authority for the rule amendments adopted herein is contained in Sections 4(i) and 303 (b), (c), (d), (h) and (r) of the Communications Act of 1934. Accordingly, it is ordered, that, effective July 23, 1976, Part 83 of the Commission's Rules are amended as set forth below.

(Secs. 4, 303, 48 Stat., as amended, 1066, 1082; 47 U.S.C. 154, 303.)

Adopted: June 9, 1976.

Released: June 18, 1976.

FEDERAL COMMUNICATIONS  
COMMISSION,  
VINCENT J. MULLINS,  
Secretary.

Part 83 of Chapter I of Title 47 of the Code of Federal Regulations is amended as follows:

1. In § 83.2 paragraph (b) is amended and new paragraphs (w), (x), (y) and (z) are added to read as follows:

§ 83.2 General.

(b) International Radio Regulations. The Radio Regulations in force annexed to the International Telecommunication Convention, Montreux, 1965, as between the Government of the United States and other contracting Governments; and such preceding international radio regulations as remain in force between the Government of the United States and other contracting Governments.

(w) Space Radiocommunication. Any radiocommunication involving the use of one or more space stations or the use of one or more passive satellites or other objects in space.

(x) Terrestrial Radiocommunication. Any radiocommunication other than space radiocommunication or radio astronomy.

(y) Terrestrial Station. A station effecting terrestrial radiocommunication.

(z) Telecommunication. Any transmission, emission or reception of signs, signals, writing, images and sounds or intelligence of any nature by wire, radio, visual or other electromagnetic systems.

2. Section 83.4 is amended by adding new paragraphs (t), (u) and (v) to read as follows:

§ 83.4 Maritime Radiodetermination Service.

(t) Radiodetermination-satellite service. A radiocommunication service involving the use of radiodetermination and the use of one or more space stations.

(u) Radionavigation-satellite service. A radiodetermination-satellite service used for the same purposes as the radionavigation service; in certain cases this service includes transmission or retransmission of supplementary information necessary for the operation of the radionavigation systems.

(v) Maritime radionavigation-satellite service. A radionavigation-satellite service in which mobile earth stations are located on board ships.

(w) Space tracking. Determination of the orbit, velocity or instantaneous position of an object in space by means of radiodetermination, excluding primary radar, for the purpose of following the movement of the object.

3. New § 83.8 is added to read as follows:

§ 83.8 Maritime mobile-satellite service.

(a) Mobile-satellite service. A radiocommunication service:

(1) Between mobile earth stations and one or more space stations; or between space stations used by this service;

(2) Or between mobile earth stations by means of one or more space stations;

(3) And if the system so requires, for connection between these space stations and one or more earth stations at specified fixed points.

(b) Maritime mobile-satellite service. A mobile-satellite service in which mobile earth stations are located on board ships. Survival craft stations and emergency position indicating radiobeacon stations may also participate in this service.

(c) Space system. Any group of cooperating earth and/or space stations employing space radiocommunication for specific purposes.

(d) Satellite system. A space system using one or more artificial earth satellites.

(e) Space station. A station located on an object which is beyond, is intended to go beyond, or has been beyond, the major portion of the earth's atmosphere.

(f) Earth station. A station located either on the earth's surface or within the major portion of the earth's atmosphere intended for communication:

(1) With one or more space stations:

(2) With one or more stations of the same kind by means of one or more passive satellites or other objects in space.

(g) Mobile earth station. An earth station intended to be used while in motion or during halts at unspecified points.

(h) Ship earth station. A mobile earth station in the maritime mobile-satellite service located on board ship.

4. Section 83.22 is amended by adding paragraph (i) to read as follows:

§ 83.22 Administrative classification of stations.

(i) Stations in the maritime mobile-satellite service subject to this part are licensed as ship earth stations and may be authorized as part of ship station licenses.

5. Section 83.36(a) is amended to read as follows:

§ 83.36 Application forms for station authorizations.

(a) FCC Form 502 shall be used for filing formal applications for new or modified marine-utility ship or ship radiotelephone and radionavigation station licenses, except for radiotelephone stations required by Title III, Part II of the Communications Act of 1934, as amended, or the Safety of Life at Sea Convention; or, except where the applicant will use radiotelegraph equipment aboard the vessel, or except when the applicant is applying for use of frequencies in the maritime mobile-satellite service. In the case of the exceptions listed in the preceding sentence, application for a new or modified ship station license shall be filed on FCC Form 501. Request for authority to use EPIRB's may be included on either of the above application forms, except that application for an EPIRB station only shall be made on Form 502. FCC Form 405-B shall be used for filing formal applications for renewal of marine-utility ship radiotelephone, ship radiotelephone and radionavigation station licenses, except for radiotelephone stations required by Title III, Part II of the Communications Act of 1934, as amended, or the Safety of Life at Sea Convention; or except where the application will use radiotelegraph equipment aboard the vessel. In the case of exceptions listed in the preceding sentence, application for renewal of a ship station license shall be filed on FCC Form 405-A.

6. Section 83.131 is amended by adding new paragraph (g) to read as follows:



### § 83.131 Authorized frequency tolerance.

(g) Authorized frequency tolerances for ship earth stations in the maritime mobile-satellite service:

Frequency range:	Tolerance—parts in 10 <sup>6</sup>
Ship Earth Stations	
1636.5–1644 MHz	5
1644–1645 MHz	5

7. Section 83.132(a) is amended by adding new subparagraph (4) to read as follows:

### § 83.132 Authorized classes of emission.

(a) \* \* \*

(4) Ship earth stations, 1636.5–1644 MHz, F3, F9, P0, P9, 1644–1645 MHz, F3, F9, P0, P9.

8. Section 83.133 is amended by adding new paragraph (d) to read as follows:

### § 83.133 Authorized bandwidth.

(d) The authorized bandwidth for ship earth station transmitters shall be the maximum width of the band of frequencies as specified in the authorization. This shall be the occupied or necessary bandwidth, whichever is greater.

9. In Section 83.134 a new paragraph (j) is added to read as follows:

### § 83.134 Transmitter power.

(j) Within the frequency bands 1636.5–1644 MHz the maximum Equivalent Isotropic Radiated Power (EIRP) by a ship earth station in any direction in the horizontal plane or in the direction of the space station shall not exceed +40 dBW in any 4 kHz band in the main beam, except upon a satisfactory showing of need for greater power, in which case a maximum of +55 dBW may be authorized. (EIRP, dBW/4 kHz, refers to the equivalent radiated power in watts relative to an isotropic radiator per 4 kHz bandwidth.)

10. In Section 83.136 paragraph (a) is amended and new paragraphs (d), (e) and (f) added to read as follows:

### § 83.136 Emission limitations.

(a) Except as otherwise provided in paragraphs (b), (c), (d) and (e) of this section, the mean power of emissions originating in transmitters authorized under this part (except radiotelegraph survival craft transmitters and transmitters authorized solely for developmental stations) shall be attenuated below the mean power of the transmitter in accordance with the following schedule:

(d) For transmitters operating in the bands 1636.5–1644 MHz the mean power of emissions shall be attenuated below the mean output power of the transmitter, in any 4 kHz band, as follows:

(1) 25 dB where the center frequency is removed from the assigned frequency by more than 50 percent up to and including 100 percent of the authorized bandwidth;

(2) 35 dB where the center frequency is removed from the assigned frequency by more than 100 percent up to 250 percent of the authorized bandwidth;

(3) An amount equal to 43 dB plus 10 times the logarithm (to the base 10) of the transmitter power in watts where the center frequency is removed from the assigned frequency by more than 250 percent of the authorized bandwidth;

(e) For transmitters operating in the band 1636.5–1644 MHz the peak power of spurious emissions and noise at the input to the transmit antenna shall be attenuated below the peak output power of the transmitter, in any 4 kHz band as follows:

(1) At 1535 MHz, 125 dB increasing linearly to 90 dB at 1622.5 MHz;

(2) 90 dB at 1622.5 MHz increasing linearly to 60 dB at 1634.0 MHz;

(3) 60 dB from 1634.0 MHz to 1647.5 MHz, except at frequencies near the transmitted carrier where the requirements of paragraphs (d) (1) through (d) (3) apply;

(4) 60 dB at 1647.5 MHz decreasing linearly to 90 dB at 1660 MHz;

(5) 90 dB at 1660 MHz decreasing linearly to 125 dB at 1750 MHz;

(6) 125 dB outside above range, except for harmonics which shall comply with paragraph 83.136(a) (3).

(f) In any event, when an emission outside of authorized bandwidth caused harmful interference, the Commission may, at its discretion require greater attenuation than specified in paragraphs (d) and (e) of this paragraph.

11. In § 83.139 paragraph (a) is amended and paragraph (g) is added to read as follows:

### § 83.139 Acceptability of transmitters for licensing.

(a) Except as provided by paragraphs (c), (d), (f), and (g) of this section, each radiotelephone transmitter authorized in a ship station or marine-utility station (other than transmitters authorized solely for developmental stations) must be type accepted by the Commission.

(g) Pending the establishment of additional technical standards, type acceptance is not required for transmitters operating in the MARISAT system in the band 1636.5–1644 MHz, provided that, such equipment shall comply with all the technical standards contained in this subpart and that, information required in paragraph 83.51 of Subpart B is submitted with the application for license.

12. In § 83.152, paragraph (a) is amended to read as follows:

### § 83.152 Operator required.

(a) Except as otherwise provided in § 83.164, the actual operation of transmitting apparatus in any radio station

in the maritime mobile, maritime mobile-satellite or maritime radiodetermination services on board a ship of the United States shall be performed only by a person holding a commercial radio operator license or permit of the required class. The minimum class of radio operator authorization required for operation of each specific classification of station is set forth in this subpart; subject, however, to the provisions of §§ 83.160, 83.161, and 83.162.

13. Section 83.159 is amended by adding a new line to the table to read as follows:

### § 83.159 Operator requirements for noncompulsory stations.

Description of station	Minimum operator authorization
Ship earth station	RP

14. New Section 83.185 is added to read as follows:

### § 83.185 Stations in the maritime mobile-satellite service.

The provisions of §§ 83.171, 83.173, 83.174, 83.175, 83.178(a), 83.180, 83.181 (a), 83.182, 83.183 and 83.184 shall apply to the operation of ship earth stations in the maritime mobile-satellite service.

15. New § 83.253 is added to read as follows:

### § 83.253 Stations in the maritime mobile-satellite service.

The provisions of §§ 83.231, 83.232, 83.242(a), 83.247 (a) and (d), and 83.252(a) shall apply to the operations of ship earth stations in the maritime mobile-satellite service.

16. In § 83.433, the table in (b) is amended and paragraph (d) is deleted in its entirety as follows:

### § 83.433 Assignable frequencies.

(b) * * *
2450 to 2500 MHz
6425 to 6525 MHz
11700 to 12200 MHz
17700 to 19700 MHz
27500 to 29500 MHz

(d) (deleted)

17. New Subpart AA is added to read as follows:

### Subpart AA—Maritime Mobile-Satellite Service

### § 83.340 Supplemental eligibility requirements.

A station license for a ship earth station in the maritime mobile-satellite service may be issued to:

(a) The owner or operator of a ship; or

(b) A corporation proposing to furnish a nonprofit radio communication service to its parent corporation, to another subsidiary of the same parent, or to its own subsidiary, where the party to be served is the owner or operator of the vessel aboard which the ship earth station is to be installed and operated.



**§ 33.841 Scope of communications.**

Ship earth stations shall be used for telecommunications related to the operation of ships and for public correspondence of persons on board.

**§ 33.842 Order of priority of telecommunications.**

The order of priority of telecommunications for ship earth stations on any frequency used for this service shall be:

- (a) Distress calls shall have absolute priority over all other transmissions.
- (b) Urgency.
- (c) Safety.
- (d) Other.

**§ 33.843 Frequencies available.**

(a) The frequency bands listed in the following table may be authorized to ship earth stations in the maritime mobile-satellite service. The conditions of use applicable to the respective bands are set forth in paragraph (b) of this section.

Band (MHz):	Conditions of use
1636.5 to 1644	1, 2, 3, 8
1644 to 1645	2, 3, 4, 5

(b) Authorization to operate in the frequency bands designated in paragraph (a) of this section shall be subject to the express limitations and conditions set forth in this paragraph.

(1) The use of the band 1636.5-1644 MHz is limited to transmissions from ship earth stations in the maritime mobile-satellite service to space stations for communication and/or radiodetermination purposes.

(2) Shared by Government and non-Government.

(3) Available for space telecommand functions performed in conjunction with maritime mobile-satellite systems operating in these bands.

(4) Authorized for developmental operations only.

(5) The use of the band 1644-1645 MHz is limited to transmissions from earth to space stations in the aeronautical mobile-satellite (R) and maritime mobile-satellite services for communication and/or radiodetermination purposes. The use of this band is subject to prior operational coordination between the two services.

(6) Network pilot transmissions may be used in the band 1636.5-1644 MHz as necessary to provide translation frequency error compensation and signal level compensation.

[FR Doc.76-18048 Filed 6-21-76;8:45 am]

[FCC 76-537; Docket 20282, etc.]

**PART 97—AMATEUR RADIO SERVICE**

**Operator Classes, Privileges and Requirements**

In the matter of amendment of Part 97 of the Commission's rules concerning operator classes, privileges, and requirements in the Amateur Radio Service.

Docket 20282; RH-1016, 1363, 1454, 1456, 1516, 1521, 1526, 1535, 1568, 1572, 1602, 1615, 1629, 1633, 1656, 1724, 1793, 1805, 1841, 1920, 1947, 1976, 1991, 2030, 2043, 2053, 2149, 2150, 2162, 2166, 2216, 2219, 2256, 2284, 2449.

1. On December 16, 1974, the Commission released a notice of proposed rulemaking in this proceeding which was published in the *FEDERAL REGISTER* on December 20, 1974, (39 FR 44042). Comments were due by June 16, 1975, and reply comments by July 16, 1975. The due dates for both comments and reply comments were extended, and the final cut-off dates were set at July 16, 1975, and September 1, 1975, respectively.

2. The purpose of the notice was to consolidate into one rulemaking proceeding the many petitions we had received which dealt one way or another with changing the structure of the Amateur Radio Service. We recognized that the requests found in the petitions were often interrelated, and should not be handled on a piecemeal basis. For this reason, we undertook a fundamental review of the entire structure of the Amateur service and proposed various changes in that structure.

3. The major proposed rule changes contained in the Notice were the following:

- (a) Creation of a "dual ladder" licensing structure;
- (b) Creation of a Communicator Class license having no telegraphy privileges or examination requirement;
- (c) Establishment of new power limits based on transmitter peak envelope power output;
- (d) New restrictions on licenses obtained by means of a volunteer-administered mail examinations;
- (e) Issuance of lifetime Amateur Extra Class operator licenses; and
- (f) Modification of the frequencies and modes available to certain license classes.

4. An estimated 4,000 comments and reply comments were filed in this Docket. They ranged from postcards to multi-page typewritten statements, often with very detailed analyses of our proposals coupled with suggested revisions thereto. All of these comments have been read and carefully considered. Also, in addition to these documents, we have closely examined the results of a poll taken by the American Radio Relay League (ARRL) which elicited responses from many thousands of that organization's members.

5. Because of severe manpower and time restrictions brought about by the recent surge in Citizens Radio Service applications, we are unable at this time to undertake the preparation of a comprehensive Report and Order which would address all of the issues raised in the Notice. We are therefore releasing this First Report and Order in which several matters of importance will be addressed, and we plan to prepare additional Reports and Orders in the future as our workload permits.

6. Firstly, we will address the matter of examinations administered by volunteer examiners. Under the system put forth in the Notice, all licenses obtained in this way, except Novice licenses and licenses granted in those instances where the applicant qualified for a volunteer-administered examination on the basis of a protracted disability which pre-

vented travel to a Commission examination point, were to be non-renewable. Such licenses were to be temporary, and the licensees would have been required to successfully complete a regular Commission-supervised examination in order to remain licensed. This arrangement would have required all presently licensed Technician (C) and Conditional licensees to undergo reexamination by the Commission. Failure to successfully complete the Commission-supervised examination would have meant that the licensee could not have continued to renew his license upon expiration.

7. As one of the broad objectives in this proceeding, we stated in the Notice that we desired to preclude, or at least minimize, any adverse impact upon presently licensed amateurs. The sentiments in the comments overwhelmingly supported this posture, and we continue to believe it to be the only reasonable course of action. Many comments objected to our "non-renewability" proposal for volunteer-administered examinations as being detrimental to amateur radio in general and excessively burdensome to thousands of licensees who, for valid reasons, did not undertake Commission-supervised examinations. Moreover, in as much as the Technician Class license program has always been, by Commission intent, based primarily on volunteer-administered examinations, a mass recall of these persons does not now appear equitable. We are in basic agreement with these objections, and have modified our proposal to blunt any ill effects on present licensees. We believe the limited resources available to us can be best utilized elsewhere.

8. However, our experience with the volunteer examination program has shown that it has been abused. Our routine call-in program of Technician (C) and Conditional Class licensees has shown that over 90 percent of such persons either fail to appear for re-examination, or if they do appear, fail the examination. Such results tend to confirm the suspicion that some such licensees obtained their licenses fraudulently. We have therefore determined to limit the availability of volunteer-administered examinations to the following categories of applicants:

(a) Applicants for the Novice license; and

(b) Applicants who show by physician's certification that they are unable to appear at a Commission examination point because of a protracted disability preventing travel.

All applications for mail examinations on the basis of a protracted disability should now be sent to the FCC field office nearest the applicant, rather than to the Commission's offices in Gettysburg, Pennsylvania. Such examinations will be conducted by a volunteer examiner selected by the Commission, or by Commission personnel.

9. Persons now holding licenses obtained on the basis of a mail examination will not be adversely affected by this rule change. All such licenses may continue to be renewed, and Rule § 97.25 is being



modified to indicate that examination credit will be given for those elements which were passed without Commission supervision. For instance, a Technician (C) licensee will automatically be given credit for Element 3 should he attempt to obtain a General Class license. He would be required only to pass Element 1(B), the 13 wpm telegraphy test. We believe that this 'grandfather' provision penalizes no one, and will encourage such licensees to upgrade. Upon application for license modification or renewal, all present Conditional Class licensees will be issued General Class licenses, and all Technician (C) licensees will be issued Technician licenses. Henceforth, all applicants passing Elements 1(B) and 3 on a volunteer-administered examination will be issued a General Class license. The Conditional Class will no longer be issued.

10. The elimination of the 175 mile distance eligibility criteria for the Conditional Class (now General Class) license will not, in our view, impose an undue hardship on those persons sincerely interested in obtaining an amateur license. The number of such applications received is now slight, and the enlargement of the Commission's examination schedule for remote points all but eliminates the usefulness of the 175 mile criterion. With respect to the Technician (C) Class license, we do not foresee any significant adverse impact resulting from its elimination. The vast majority of persons seeking that license live within convenient travel distance of a Commission examination point, and our examination policy with respect to the Technician Class is now consistent with our policy governing all license classes except Novice. As proposed, we are also deleting the availability of mail examinations on the basis of eligibility criteria set out in § 97.27 (c) and (d).

11. A related issue we will address at this time involves the Novice Class license. Many thousands of Novice examinations are given each year, and this has been the gateway to Amateur radio for over half of all present licensees. We believe the experience of taking the Novice test to be very worthwhile, in as much as there is no overlap in the Novice examination questions and the questions found on more advanced examinations. We are therefore amending the Rules to require that all persons entering the Amateur Radio Service, at any level, successfully complete examination element 2 in addition to the other examination elements presently required for the license examination being undertaken. We are also at this time deleting the provision in § 97.9(f) which prohibits the issuance of a Novice Class license to a person who has held within the prior 12 month period any class of Amateur radio license. We believe this provision serves no useful purpose and has prohibited otherwise qualified persons from remaining in Amateur radio.

12. The final matter we will touch on in this First Report and Order involves the privileges available to Technician and Novice Class licensees. Until several

years ago, it was permissible for a licensee to hold both the Novice and Technician Classes of license at the same time. Such dual licensing was subsequently prohibited in § 97.9(f), which states that the Novice Class license may not be concurrently held with any other class of license. We have received several petitions to lift this restriction, and in our Notice we proposed to include Novice Class privileges in the Technician Class license. We are herein adopting that proposal, which was widely supported in the comments. We are also modifying the maximum permissible transmitter power input which Novices, and all other license classes, may utilize when operating on Novice frequencies. We are limiting to 250 watts the maximum power input which may be used by any class of operator transmitting in Novice subbands. We are adopting this change for two reasons; firstly, it will mean that a Novice can buy equipment which will be readily useable and practical when he upgrades to General Class and above. Presently, in order to conform to the 75 watt power limit, Novices oftentimes are forced to buy low power transmitters which they find have limited usefulness outside Novice subbands; and secondly, we see no reason to permit non-Novices to utilize high power in a sub-band where such power gives them a significant advantage over a license class which is restricted to that sub-band.

13. In view of the foregoing, we are of the opinion that the amended rules as discussed above are in the public interest, convenience, and necessity. Accordingly, pursuant to authority contained in section 4(i) and 303 of the Communications Act of 1934, as amended, it is ordered, That Part 97 of the Commission's rules is amended as set forth below. These amendments become effective July 23, 1976.

Adopted: June 9, 1976.

Released: June 15, 1976.

(Secs. 4, 303, 48 Stat., as amended, 1066, 1082; 47 U.S.C. 154, 303.)

FEDERAL COMMUNICATIONS  
COMMISSION,  
VINCENT J. MULLINS,  
Secretary.

Chapter 1, Part 97 of Title 47 of the Code of Federal Regulations is amended as follows:

1. In § 97.7, paragraphs (b), (c) and (d) are amended and (e) is added to read as follows:

§ 97.7 Privileges of operator licenses.

(b) *General Class.* All authorized amateur privileges except those exclusive operating privileges which are reserved to the Advanced Class and/or Amateur Extra Class.

(c) *Conditional Class.* Same privileges as General Class. New Conditional Class licenses will not be issued. Present Conditional Class licensees will be issued General Class licenses at time of renewal or modification.

(d) *Technician Class.* All authorized amateur privileges on the frequencies 50.1-54 MHz and 145-148 MHz and in the Amateur bands above 220 MHz. Such licenses also carry the full privileges of the Novice Class license.

(e) *Novice Class.* Radiotelegraphy in the frequency bands 3700-3750 kHz, 7100-7150 kHz (7050-7075 kHz when the terrestrial station location is not within Region 2), 21,100-21,200 kHz, and 28,100-28,200 kHz, using only Type A1 emission.

2. In § 97.9 the introductory text is amended to read as follows:

§ 97.9 Eligibility for new operator license.

Anyone except a representative of a foreign government is eligible for an amateur operator license.

3. Section 97.11(b) is amended to read as follows:

§ 97.11 Application for operator license.

(b) An application (FCC Form 610) for a new operator license, including an application for change in operating privileges, which requests an examination supervised by a volunteer examiner under the provisions of § 97.27, shall be submitted to the FCC field office nearest the applicant. Applications for the Novice Class license should be sent to the Commission's offices in Gettysburg, Pa. 17325. All applications should be accompanied by any necessary filing fee.

4. Section 97.23 is amended to read as follows:

§ 97.23 Examination requirements.

Applicants for operator licenses will be required to pass the following examination elements:

- (a) Amateur Extra Class: Elements 1(C), 2, 3, 4(A) and 4(B);
- (b) Advanced Class: Elements 1(B), 2, 3, and 4(A);
- (c) General Class: Elements 1(B), 2, and 3;
- (d) Technician Class: Elements 1(A), 2, and 3;
- (e) Novice Class: Elements 1(A) and 2.

5. Section 97.25(a) is amended to read as follows:

§ 97.25 Examination credit.

(a) An applicant for a higher class of amateur operator license who holds any valid amateur license will be required to pass only those elements of the higher class examination that are not included in the examination for the amateur license held.

6. Section 97.27 is retitled and the introductory text amended to read as follows:

§ 97.27 Mail examination for applicants unable to travel.

The Commission may permit the examinations for an Amateur Extra, Advanced, General, or Technician Class



license to be administered at a location other than a Commission examination point by an examiner chosen by the Commission when it is shown by physician's certification that the applicant is unable to appear at a regular Commission examination point because of a protracted disability preventing travel.

7. Section 97.28 is retitled and amended to read as follows:

**§ 97.28 Manner of conducting examinations.**

(a) Except as provided in § 97.27, all examinations for Amateur Extra, Advanced, General, and Technician Class operator licenses will be conducted by authorized Commission personnel or representatives at locations and times specified by the Commission. Examination elements given under the provisions of § 97.27 will be administered by an examiner selected by the Commission. All applications for consideration of eligibility under § 97.27 should be filed on FCC Form 610, and should be sent to the FCC field office nearest the applicant. (A list of these offices appears in § 0.121 of the Commission's Rules and can be obtained from the Regional Services Division, Field Operations Bureau, FCC, Washington, D.C. 20554, or any field office.)

(b) Unless otherwise prescribed by the Commission, examinations for the Novice Class license will be conducted and supervised by a volunteer examiner selected by the applicant. The volunteer examiner shall be at least 21 years of age, shall be unrelated to the applicant, and shall be the holder of an Amateur Extra, Advanced, or General Class operator license. The written portion of the Novice examination, Element 2, shall be obtained, administered, and submitted in accordance with the following procedure:

(1) Within 10 days after successfully completing telegraphy examination element (1A), an applicant shall submit an application (FCC Form 610) to the Commission's office in Gettysburg, Pennsylvania 17325. The application shall include a written request from the volunteer examiner for the examination papers for Element 2. The examiner's written request shall include (i) the names and permanent addresses of the examiner and the applicant, (ii) a description of the examiner's qualifications to administer the examination, (iii) the examiner's statement that the applicant has passed telegraphy element 1(A) under his supervision within the 10 days prior to submission of the request, and (iv) the examiner's written signature. Examination papers will be forwarded only to the volunteer examiner.

(2) The volunteer examiner shall be responsible for the proper conduct and necessary supervision of the examination. Administration of the examination shall be in accordance with the instructions included with the examination papers.

(3) The examination papers, either completed or unopened in the event the examination is not taken, shall be re-

turned by the volunteer examiner to the Commission's offices in Gettysburg, Pa., no later than 30 days after the date the papers are mailed by the Commission (the date of mailing is normally stamped by the Commission on the outside of the examination envelope).

(c) The code test required of an applicant for an amateur radio operator license, in accordance with the provisions of §§ 97.21 and 97.23 shall determine the applicants ability to transmit by hand key (straight key or, if supplied by the applicant, any other type of hand operated key such as a semi-automatic or electronic key, but not a keyboard keyer) and to receive by ear, in plain language, messages in the International Morse Code at not less than the prescribed speed during a five minute test period. Each five characters shall be counted as one word. Each punctuation mark and numeral shall be counted as two characters.

(d) All written portions of the examinations for amateur operator privileges shall be completed by the applicant in legible handwriting or hand printing. Whenever the applicant's signature is required, his normal signature shall be used. Applicants unable to comply with these requirements, because of physical disability, may dictate their answers to the examination questions and the receiving code test. If the examination or any part thereof is dictated, the examiner shall certify the nature of the applicant's disability and the name and address of the person(s) taking and transcribing the applicant's dictation.

**§ 97.29 [Removed].**

8. Section 97.29 is deleted and redesignated as reserved.

9. Section 97.31(a) is amended to read as follows:

**§ 97.31 Grading of examinations.**

(a) Code tests for sending and receiving are graded separately.

10. Section 97.33 is revised to read as follows:

**§ 97.33 Eligibility for re-examination.**

An applicant who fails a written examination for an amateur radio operator license may not take another written examination for the same or higher class license within 30 days.

**§ 97.35 [Removed].**

11. Section 97.35 is deleted.

12. In § 97.67 paragraph (a) is amended and (d) is added to read as follows:

**§ 97.67 Maximum authorized power.**

(a) Except for power restrictions as set forth in § 97.61 and paragraph (d) below each amateur transmitter may be operated with a power input not exceeding one kilowatt to the plate circuit of the final amplifier stage of an amplifier oscillator transmitter or to the plate circuit of an oscillator transmitter. An amateur transmitter operating with a power input exceeding 900 watts to the plate circuit shall provide means for accurately

measuring the plate power input to the vacuum tube or tubes supplying power to the antenna.

(d) In the frequency bands 3700-3750 kHz, 7100-7150kHz (7050-7075 kHz when the terrestrial location of the station is not within Region 2) 21,100-21,200 kHz, and 28,100-28,200 kHz, the maximum plate input power which may be utilized is 250 watts.

[FR Doc.76-18116 Filed 6-21-76;8:45 am]

**Title 49—Transportation**

**SUBTITLE A—OFFICE OF THE SECRETARY OF TRANSPORTATION**

[OST Docket No. 1; Amdt. 1-117]

**PART 1—ORGANIZATION AND DELEGATION OF POWERS AND DUTIES**

**Delegation Under the Energy Policy and Conservation Act**

The purpose of this amendment is to delegate to the National Highway Traffic Safety Administrator functions vested in the Secretary by the Energy Policy and Conservation Act, Pub. L. 94-163, which added Title V to the Motor Vehicle Information and Cost Savings Act of 1972 (49 U.S.C. 1902 et seq.).

Since this amendment relates to Departmental management, procedures and practices, notice and public procedure thereon are unnecessary and it may be made effective in fewer than 30 days after publication in the FEDERAL REGISTER.

In consideration of the foregoing, paragraph (f) of § 1.50 of Part I of Title 49, Code of Federal Regulations, is revised to read as follows:

**§ 1.50 Delegations to National Highway Traffic Safety Administrator.**

The National Highway Traffic Safety Administrator is delegated authority to:

(f) Carry out the functions vested in the Secretary by the Motor Vehicle Information and Cost Savings Act of 1972, as amended (49 U.S.C. 1902 et seq.) except section 512.

Effective date: This amendment is effective June 22, 1976.

(Sec. 9(e), Department of Transportation Act (49 U.S.C. 1657(e)))

Issued in Washington, D.C., on June 15, 1976.

JOHN W. BARNUM,  
Acting Secretary  
of Transportation.

[FR Doc.76-18060 Filed 6-21-76;8:45 am]

**Title 50—Wildlife and Fisheries**

**CHAPTER II—NATIONAL MARINE FISHERIES SERVICE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, DEPARTMENT OF COMMERCE**

**PART 260—INSPECTION AND CERTIFICATION**

**Final Amendments—Fees and Charges**

In the FEDERAL REGISTER of Friday, January 16, 1976, 41 FR 2396, Interim Amendments were published by the National Marine Fisheries Service to amend



certain sections of Part 260—Inspection and Certification, pertaining to Fees and Charges. The interim amendments were made to adjust the rates for fees and charges upward to provide for the recovery of costs attributable to the inspection program, as required in the Agricultural Marketing Act, as amended (7 U.S.C. 1622). The increase in rates was necessary due to the increased costs incurred in conducting the program, and was in accordance with the full cost recovery policy contained in Departmental Administrative Order 203-5. The amended rates became effective January 16,

1976, the date of their publication in the FEDERAL REGISTER.

Interested persons were given until February 17, 1976, to submit written comments regarding the interim amendments. Two comments were received. Both were from fishery products processing firms which participate in the inspection program, and objected to the rate increases.

A study of recent program costs and revenue, and a projection of them through the remainder of FY 1976 based on the best available information, indicates that the fees and charges estab-

lished by the interim amendments will enable the program to attain full program cost recovery. The Administrator has determined that the increased rates are necessary for the program to meet the Departmental policy regarding full cost recovery. Therefore, the fees and charges established in the Interim Amendments are finally adopted effective upon the date of publication of this notice.

Dated: June 16, 1976.

ROBERT M. WHITE,  
*Administrator.*

[FR Doc.76-18097 Filed 6-21-76;8:45 am]